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WE CLAIM

- 1. In a scanner including a CPU, a memory, a linear sensor array, and first and second spaced-apart 2D sensor arrays serving as motion encoders, the CPU serving to process raw scan data collected by the linear sensor array from an imaged object into final scan data in accordance with scanner motion data provided from said 2D sensors, an improvement comprising software instructions in the memory causing the scanner to discern a machine-readable identifier from scan data acquired from the object.
- 2. The scanner of claim 1, further comprising a wireless interface, and a display, said software instructions causing the scanner to relay the identifier by the wireless interface to a remote server, and for processing information returned through the wireless interface for presentation on said display.
- 3. The scanner of claim 1 in which the software instructions cause the CPU to process data from the 2D sensor arrays for a purpose in addition to sensing scanner motion.
- 4. The scanner of claim 3 in which said purpose includes beginning a watermark detection process before data from the linear sensor array is finally processed.
- 5. The scanner of claim 4 in which said purpose includes beginning to sense a watermark calibration signal.
- 6. The scanner of claim 3 in which said purpose includes identifying portions of the data collected by the linear sensor array that are relatively more likely to include detectable identifier data.
 - 7. The scanner of claim 3 in which said purpose is to quantify an object surface characteristic, wherein a filter can be applied to the scan data in accordance therewith.

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- 8. The scanner of claim 3 in which said purpose is to assess relative distance to the object from different portions of the scanner.
- 9. The scanner of claim 3 in which said purpose is to quantify an affine distortion in the scan data, so that compensation may be applied therefore.
 - 10. The scanner of claim 1 in which the identifier is steganographically encoded as a digital watermark.
 - 11. The scanner of claim 1 in which the identifier is encoded as a barcode.
 - 12. A scanner comprising a linear sensor array, a CPU, an interface for coupling to the internet, and a user interface including a display screen and user controls, the scanner being adapted to transmit machine-readable data sensed from scanned objects to the internet, and for presenting to a user HTML information received back from the internet.



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